

Work Order ID 82672

April-04-12 1:55:06 PM

82672

Page 1

Item ID: D3778-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Bracket

Stop ***NS2***

Start Date: 04/04/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/04/04

Tooling:

Date:

Run Start ***NR1***

QC: _____ Date: _____

Date:

SPC (Y/N): _____

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3778	B								

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3778

Dwg Rev: B

Prog Rev: B

* ****grain direction along 2.34" ****

2-Deburr if necessary

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

⑥

Jim/MLJ
12-4-11

⑥

Jim/MLJ
12-4-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 82672

April-04-12 1:55:06 PM

82672

Page 2

Item ID: D3778-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bracket
 Start Date: 04/04/2012 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 18/04/2012 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				(6)			
130 *130* Brake NC Brake NC	Bend as per dwg NC BRAKE Memo	0.00 0.00				(6)			8/12/13
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				(6)			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 82672

82672

Page 3

April-04-12 1:55:06 PM

Item ID: D3778-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Bracket

Stop ***NS2***

Start Date: 04/04/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 18/04/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150 Chemical Conversion Coat per QSI005 4.1

0.00

150

HandFinish

Memo

0.00

Hand Finishing

(6) 7/6 12-4-16

155 QC7-Inspect Chemical Conversion Coat

0.00

155

QC

Memo

0.00

Quality Control

6X ~~✓~~ m-k 12/24/16

160 Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

160

Powdercoat

Memo

0.00

Powder Coating

START TIME: 8-15

OVEN TEMPERATURE: 320 OF

FINISH TIME: 8-45

6X ~~✓~~ m-k 12/04/23

M117338

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

April-04-12 1:55:06 PM

82672

Page 4

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Bracket

6

Cust Item ID:

6

Customer:

Reference:

Run Start *NR1*

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop *NR2*

QC:

Date:

SPC (Y/N):

Date:

**Insp.
Stamp**

0.00

170

QC

Memo

0.00

Quality Control

180

Identify as per dwg & Stock Location:

0.00

180

Packaging

Memo

0.00

Packaging

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

MF
12-04-24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-04-12 1:55:11 PM

Page 1

Work Order ID: 82672

82672

Parent Item: D3778-1

D3778-1

Parent Item Name: Bracket

Start Date: 04/04/2012

Required Date: 18/04/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A new issue 08-04-15 DD verified by:EC
IPP Rev:B 08-05-14 revA as per ECN1171 DD verified by:EC
IPP Rev:C 08-05-22 add powder coating DD verified by:ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M5052H32S.090		Purchased	No			100	sf	26.7200	0.0934	0.589895			

M5052H32S 090

**

5052-H32.090 Sheet

Location

Loc Qty

Loc Code

MAT022

26.72

118641

11.82

3019

14.9

118641

Jim - mly
12-4-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

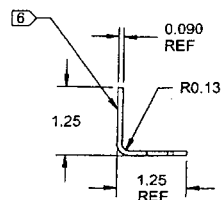
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

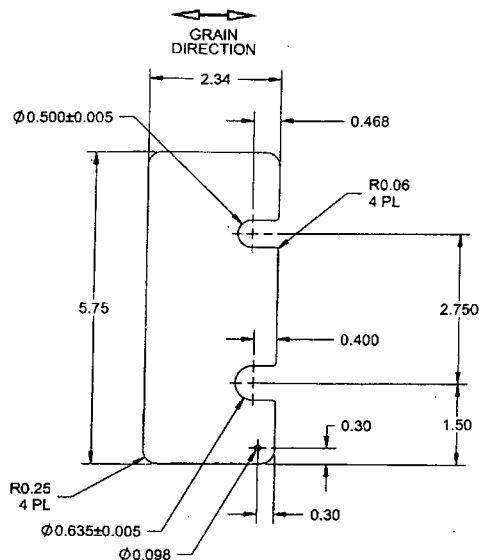
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3778-1 BRACKET



D3778-1F FLAT PATTERN

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 82672 MLS

12/04/04

RELEASED
2012-03-30

NOTES:

- 1) MATERIAL: 5052-H32 ALUMINUM SHEET, 0.090 THICK PER AMS-QQ-A-250/8 OR AMS 4016 (REF DART SPEC M5052H32.090)
OR
6061-T6-T62 ALUMINUM SHEET, 0.090 THICK PER AMS-QQ-A-250/11 OR AMS 4025/4027 (REF DART SPEC M6061T60.090)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3778-X" AND B/N "BXXXXX"
PER DART QSI 044 6.1 (FINE POINT MARKER)
- 7) WEIGHT -1: 0.11 lbs
-3: 0.17 lbs

B	ADDED -3 (REF: PAR 12-163)	AJS	12.03.15
A	NEW ISSUE	PH	08.04.11
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3778	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	12.03.15	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINTED AND CONTAINED, AND IS SUPPLIED BY THE EXPRESS OR IMPLIED OR ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

.3175

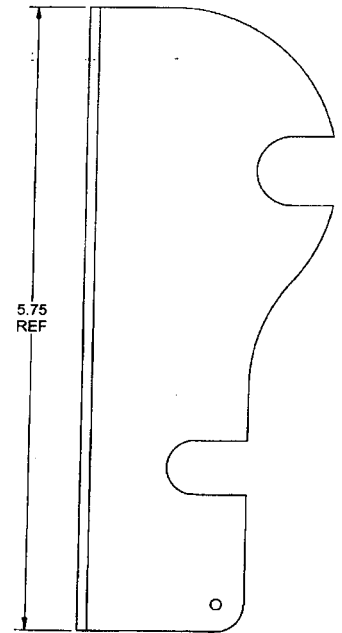
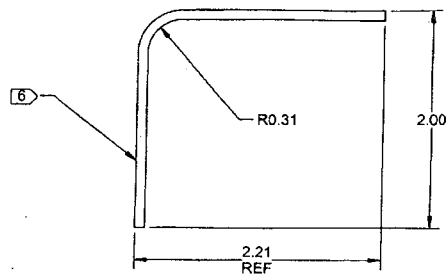
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

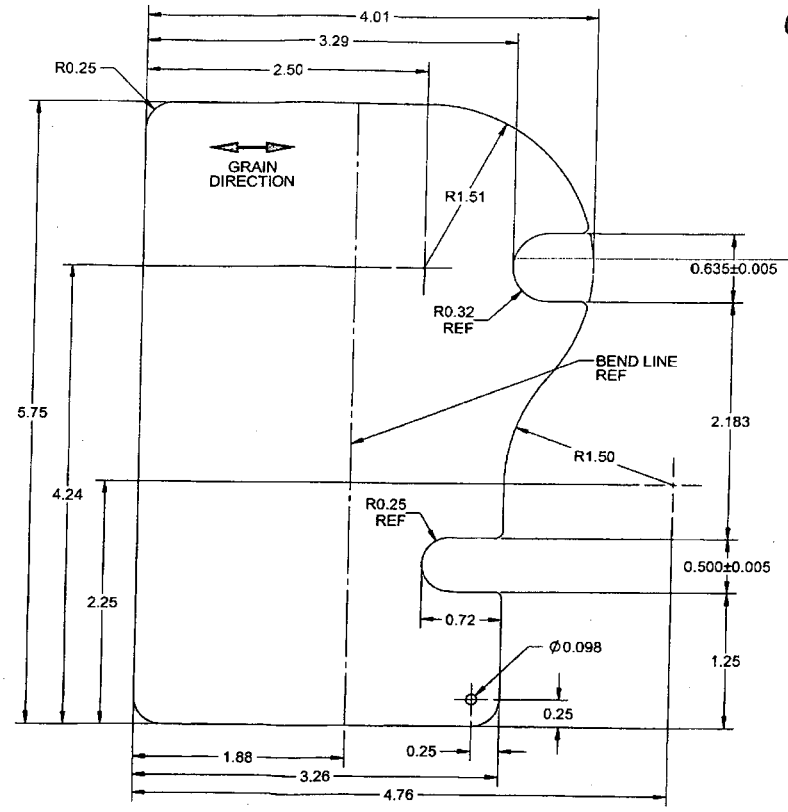
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

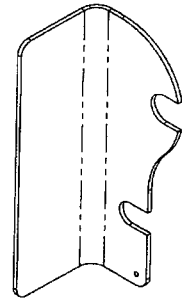


D3778-3 BRACKET



D3778-3F BRACKET
(FLAT PATTERN)

82672



RELEASED
2012-03-30

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3778	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	12.03.15	<small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries